

Institution: University of the West of Scotland
Unit of Assessment: 34: Communication, Cultural and Media Studies, Library and Information Management
<p>1. Unit context and structure, research and impact strategy</p> <p>In 2019, UWS celebrated 20 years of research and teaching in the screen and media sectors. Our internationally recognised research is fundamental to understanding the creative industries and informs our distinctive approach to teaching and learning. This is our third submission to this unit (and its forebears) since 2008, and over the last 6 years we have substantially increased our commitment to the volume and quality of our research activity, resulting in an increase in the head count of staff returned from 15 in REF2014 to 20 in REF2021 (up 33.3%). Our research income has grown from GBP139,000 to GBP540,000 (including awards from Innovate UK, AHRC and British Academy), our doctoral student community has doubled from 35 to 70, and the scope and ambition of our public facing engagement activities have significantly expanded with events undertaken in multiple, diverse settings, from prisons to embassies across five continents.</p> <p>1.1 Structure of Research</p> <p>During the last six years our specialised research has centred upon the Creative Media Academy (CMA) that now sits within the School of Business and Creative Industries (BCI). Established in 2012 as a centre for excellence in the creative industries, the CMA is one of only three such centres in Scotland accredited by Creative Skillset. The Scottish context is an important if not defining context for UWS, as the majority of the Scottish creative industries have their nexus in Glasgow where the BBC, Scottish Television (STV) and Film City are all located. The Academy currently holds industry accreditation from ScreenSkills UK, BJTC and JAMES and the majority of our graduates from our degree programmes (Journalism, Broadcast Production, Film, Performance, Music and New Media Art) find employment within the creative industries and cultural sector, alongside increasing numbers of students progressing to postgraduate research. The CMA thus provides the structural and strategic locus for nurturing and supporting our research and impact activities that have relevance for industry and society, nationally and internationally. Our unit also benefits from a strategic partnership with Renfrewshire Council that led to the co-funding of the interdisciplinary Centre for Culture, Sport and Events (CCSE) with a specialist focus on culture-led regeneration in the West of Scotland.</p> <p>The majority of our research is interdisciplinary and collaborative in nature. We work closely with an ever-increasing range of non-academic partners to achieve national and international impact and innovation. Our unit has a strong focus on creative media practice, cultural studies, arts, and media and film studies. Our research has a particular focus on the unpacking, exploration and representation of complex human experiences through experimentation in a wide range of media practices (film, VR, music, performance, art, sound), resulting in what might be most productively understood as novel media ethnographies.</p> <p>1.2 Research Objectives</p> <p>1.2.1 Current REF period: Review of REF2014</p> <p>In the current REF period, the CMA has been central to creating an inclusive and interdisciplinary research environment. Led by Professor of Media Practice, Nick Higgins, with support from a research and impact leadership team of Professors Katarzyna Kosmala, Graham Jeffery and Reader Dr Joanna Collinson-Scott, the academy has adopted a three-pronged strategy of partnership, interdisciplinarity and innovation that is enabled through mentorship programmes, research seed funds and access to specialised equipment and estate, including the new UWS Immersive Virtual Reality Lab (Paisley) and the UWS Screen Space at Film City (Glasgow) that enable us to deliver our research activities.</p> <p>Our submission in 2014 set out 6 objectives that we have either achieved or surpassed during the last six years. Our objective to engender cross-disciplinary creative and cultural research can be evidenced by the breadth of our research outputs and variety of funding sources (Scott/ESRC,</p>

Jeffery/AHRC, Kosmala/Creative Scotland). Our ambition **to support national and international public engagement events** has been achieved through the delivery of events in India (Jeffery), China (Higgins), Japan (Kosmala), Africa (Higgins) and through collaborations with UNESCO & the UN (Higgins). Perhaps most impressive, was our ambition to **sustain our PhD community**, a community that had grown from 7 to 35 over 2008-14 period, but has now doubled to a community of 70 during the 2014-20 period.

The research areas we set out as priorities have all expanded. Our support for a **music research cluster** has resulted in the doubling of researchers submitted (up from 3 to 6) and is especially notable for employing music as methodology to explore social and cultural issues (Collinson-Scott, McGeechan, Scott). Our objective to **build on research expertise in sport and mega-events** has resulted in approximately GBP800,000 of awards most notably from the European Commission (GBP150,000), Horizon 2020 (GBP140,000) and the British Council (GBP100,000). Our success in this area is such that we have strategically submitted **McGillivray** and **McPherson** to the Sports UOA24. Additionally, our objective to **build on our work in participatory research practice** is evidenced in our impact case study, 'Creating Value and Transforming Lives through Arts and Media Practice' (Jeffery, Kosmala & Collinson-Scott) that demonstrates how our AHRC and ESRC funded research has created international impact in Scotland, Europe and India.

1.2.2 Strategy: Next Five Years

Our objectives are fourfold: firstly, we aim to build on our innovative creative engagement with hard to reach communities and subject matters to form the basis of a dynamic, open, inclusive and interdisciplinary research culture. Secondly, we aspire to be recognized as an international leader in the emerging field of practice-based media ethnography. Thirdly, we will support and enable our growing community of early career researchers to work across disciplines to fulfil their potential both nationally and internationally. Finally, we seek to produce meaningful world class research that impacts lives and transforms life chances and, in particular, contributes towards the achievement of the UN Sustainable Development Goals and the UK Industrial Strategy.

The CMA seeks to achieve its objectives through: a) **Partnership**: We will seek to work with the very best and most impactful partners both locally and internationally. We will collaborate with fellow HEIs, cultural institutions and creative industry actors. Partnerships already in development include the National Theatre of Scotland, the BBC, Carnegie Mellon, St. Andrews University, the United Nations, HERA and the British Council in locations as diverse as Guyana, South Africa and Bangladesh. b) **Interdisciplinarity**: we plan to compliment the university's central research strategy in which a focus on the UN Sustainable Development Goals supports a strategy of interdisciplinarity both between research groupings within the institution and externally. Currently we are developing projects with health, sport and heritage with a direct connection to international events including COP26 and the UN inclusive education thematic. c) **Innovation**: Our innovative research practices have been recognised with awards, media recognition and international industry adoption, we plan to build on this working closely with creative industry partners in Scotland (games & animation studios) and internationally (Los Angeles, Mumbai & Dhaka) to continue to explore how the latest technology can be deployed within our media ethnographic research projects to render complex realities understandable and accessible to both academic and public audiences.

Finally, it would be impossible to write this submission without reference to COVID-19. The international health crisis has had a significant impact on our ability to conduct research but it has also led to notable innovation and collaboration with direct support of relief work in India (Jeffery), digital release of projects (Scott, Higgins & Snowdon) and online participation in festivals and delivery of conferences (Festival Events and COVID-19: navigating a Global Pandemic, May 2020) that evidence our resolve and relevance to the communities we work alongside.

As a result, the CMA's future research focus now includes three emergent research opportunities: 1. **fostering innovation during the time of COVID-19** (India) 2. **virtual modes of production &**

decolonizing research (VR workflows and new research on performance in Africa) 3. **digital dissemination** (independent cinema & direct distribution).

1.3 Achievement of impact

Our **partnership approach** enables us to build on established relationships with cultural institutions, organisations and fellow HEIs. A notable example of how this partnership approach has led to research outcomes with international impact is our relationship with Glasgow Film that led to the joint delivery of two symposia on Virtual Reality, the curation of the VR programme at the Glasgow Short Film Festival (2017 and 2019) attracting audiences of 2000 and the establishment of an SFC and AHRC funded Knowledge Transfer Partnership with the award-winning ISO digital design studio that resulted in an 'outstanding' rating from Innovate UK.

1.3.1 Impact Case Studies and Impact Approach

As evidenced in our impact case studies; 'Innovative Screen Practice and Social Change' (Higgins, Tianqi Yu & Snowdon) and 'Creating Value and Transforming Lives through Arts and Media Practice' (Jeffery, Kosmala and Collinson-Scott), **innovation** is at the heart of our research and impact strategies resulting in genuinely transformative national and international impact. Collinson-Scott's research in songwriting and restorative justice (funded by ESRC), Kosmala's visual arts practice amongst post-industrial communities across Europe (Creative Scotland and RSE), Jeffery and Parry's Compound 13 Lab in the Mumbai informal settlement of Dharavi (supported by AHRC/GCRF/British Academy) and Higgins, Yu and Snowdon's media ethnographies in Zambia, China, and the Middle East respectively, all result in creative outputs that when combined with our partners such as the United Nations and Afridocs, reach global audiences and change lives in ways that traditional academic outputs often struggle to achieve.

1.4 Interdisciplinary Research

Our approach to arts and creative media practice is to a large extent disciplinary agnostic. Our researchers in many instances view media as a methodology and means of engaging with the world rather than an end in and of itself. This ethos leads us to collaborate with colleagues in environmental science (**Jeffery**), sociology (**Higgins** and **Kosmala**), computing (**Higgins**), African studies (**Collins**), criminology (**Collinson-Scott**), events, sport and culture-led regeneration (**McGillivray** and **McPherson**), heritage studies (**Kosmala** and **Jeffery**) and visual arts and cultural studies (**Kosmala** and **Jeffery**).

We nurture this research through the CMA's interdisciplinary strategy of supporting colleagues to establish new cross-school research clusters and centres, including the Centre for Culture, Sport and Events (**McPherson** and **McGillivray**/2018), the GCRF Protracted Crisis Research Centre (**Jeffery**/2020), UWS Immersive (**Higgins**/2017) and to be actively involved in existing centres such as the Centre for African Research on Enterprise and Economic Development (**Collins**, **Higgins**) and the Scottish Centre for Island Studies (**Burnett**).

1.5 Open Research Environment

Our researchers are actively involved in the creative exploration and dissemination of open source software in music projects (**Kirby**) computer art (**Higgins**) and maker lab technologies such as 3D printing (**Jeffery**). This research has in turn been disseminated not only amongst academic communities via conferences and open access publications/recordings but through free coding and lab workshops with communities as far afield as Paisley and Mumbai.

Professor John Robertson's 'BBC Bias and the Scots Referendum' report (Open Democracy, Feb 2014) was covered by all major UK broadcasters and broadsheets and made a significant contribution to the evidence base that resulted in the 2019 establishment of the new BBC Scotland channel. Access to the media and a critical understanding of the news is central to our research practice, building on our partnership with STV 2 to deliver local news from our campus (2015-17), we continue to work with Ofcom (Small Screen: Big Debate 2020) to create an open space for debate and dialogue on the role of broadcasting in Scotland and the UK.

1.6 Research Integrity

All our research applications and activities undergo a rigorous peer review process before being submitted to the school ethics committee. Much of our creative research is based on relationships of trust and premised upon the concept of informed consent. This qualitative ethical approach often leads us to adopt participatory and collaborative methodologies that result in the co-production of knowledge. Our expertise and best practice in this area is evidenced by our delivery of research workshops on these approaches for both the Scottish Graduate School for Arts and Humanities (SGSAH) and the Scottish Graduate School for Social Sciences (SGSSS).

2. People

This submission includes 20 staff, an increase of 33.3% on the number of research active colleagues submitted to REF 2014 (this includes Category A and B staff). This is a clear indicator of progress in broadening the base of research-active staff within our unit. Our PhD community has doubled from 35 to 70, and doctoral completions have risen from 7 to 23 (12 submitted to REF4a) - clear evidence of the establishment of a flourishing and nurturing interdisciplinary research community, identified as one of our key ambitions in our submission to REF 2014.

2.1 Staff Development Strategy

Following our investment in senior researchers (McGillivray, McPherson, Higgins) in REF 2014, the six years hence have seen our staffing strategy switch focus to establish an active early career research community to complement our senior team. We have achieved this in two ways; firstly, by recruiting 6 new research excellent lecturing staff (**Snowdon, Tianqi Yu, Green, Collins, Layton, Kirby**) and secondly, through supporting existing staff to complete their PhDs, 6 of whom have completed their doctorates during the submission period. We support staff who undertake a PhD at UWS or externally with the payment of their fees. Our current submission includes 8 colleagues who have benefited from this research development path, all producing internationally excellent research outputs (40% of our FTE submission).

The CMA research leadership team (**Higgins, Jeffery, Scott**) collaborate with line-managers to ensure sufficient time is allocated in staff activity plans to allow research active staff to meet publication deadlines, complete doctoral submissions and deliver practice-based productions. We work collegially to reduce teaching loads in addition to the 0.5 weekly research time and any funded research allocation. Staff submit annual research plans and the CMA offers both individual and peer supported mentorship for our early career researcher and staff PhD groups.

CMA research funds (awards of GBP300-GBP2,000, from GBP20,000 fund per annum) support national and international conference attendance, fieldwork activities and resources, Continuous Professional Development (CPD) and seedcorn funds for projects and collaborations. The CMA seminar series offers ECRs, established and visiting staff a supportive platform to share their research. Our staff also significantly benefit from their involvement in cross-university interdisciplinary centres and a CMA led peer supported grant application review process has resulted in significant funding from the Global Challenges Research Fund (GCRF; Jeffery, Collins) and in the wider international reach and engagement of our funded research projects (Higgins, Snowdon, Yu).

2.2 Staffing and Recruitment

Leadership in research comes from our five Professors and two Readers. **Higgins** (CMA director) holds overall responsibility for research within the unit. His practice-based research in documentary film and virtual reality is world-renowned and he has been invited to screen work at **The Smithsonian (Washington DC), the United Nations (Geneva) and the British Embassy in Beijing**, the latter as part of an international showcase on academia and the UK creative industries. Representative of Higgins's innovation in research is his AHRC and SFC funded Innovate UK Knowledge Transfer Partnership to establish immersive services within the award-winning Glasgow design agency ISO design. Rated as 'outstanding' by Innovate UK, this work was showcased at the AHRC's *Beyond* Conference in Edinburgh (Nov 2019) and forms a part of the interdisciplinary UWS Immersive research cluster that he leads.

Jeffery heads up the interdisciplinary GCRF Protracted Crisis Research Centre. His collaborative work developing Compound 13 Lab in Dharavi, Mumbai, has been showcased by the AHRC at international seminars and conferences (GCRF Summit, Delhi, 2017 and London GCRF Summit 2018). The Lab is at the forefront of innovation in participatory methods, using arts and design-based approaches to collaboratively investigate issues of waste, work and survival with local residents in the context of a global South megacity. **Kosmala** has established a body of research in curation, critical art writing, feminism and gender studies examining the politics of representation and precarity internationally. Focussed mainly around a comparative longitudinal study with the former ship-building communities in Scotland and Poland, her work explores questions of cultural heritage in post-industrial communities. Prof Kosmala often raises such issues in her role as a member of the European Cultural Parliament. Sitting alongside Prof Kosmala in the Parliament is **McPherson** whom, working closely with **McGillivray**, conducts research on heritage, sports, events and cultural participation, with a particular focus on the communities and citizens of Renfrewshire. Whilst Profs McPherson and McGillivray were included in our REF2014 submission, this time their research is naturally fitting to UOA24 - Sport and Exercise Sciences, Leisure and Tourism. This does not overshadow their ongoing and valued contribution to our unit's research community and culture.

In addition to the professoriate our unit benefits from the work of two Readers; **Collinson-Scott** and **Clifford**. **Scott** has demonstrated impressive research leadership in the area of song-writing and participatory arts, with successful outputs and grant capture on AHRC and ESRC projects, working collaboratively with colleagues from the disciplines of Criminology and Environmental Studies at the universities of Glasgow and Edinburgh respectively. **Clifford** organises our research seminar series and also works in music but adopts a computational methodology and practice and most notably hosted the international conference xCOAX 2015, also editing the conference proceedings. Given the focus of her work she has been submitted to UOA11 - Computer Science and Informatics.

Amongst our subject clusters there are also examples of excellence that make our research community particularly distinctive. Two examples of this are our research on the Scottish popular music canon and our practice-based research on the documentary form.

Scott has undertaken the most comprehensive empirical study to date of what might constitute the 'classic Scottish album'. His research underpins a 38-episode BBC Scotland podcast series with over 200,000 downloads to date and his work has been presented to academic audiences in Canada, Italy, Japan and the UK. The practice-based research of **McGeechan** fuses traditional Gaelic music with elements of the Scottish popular songbook. Collaborating with the Prague philharmonic orchestra his *Starless* original compositions were nominated for Scots album of the year in 2017. Formal experiments also characterise **Kirby's** research that fuses open source software with performative innovation.

The award-winning feature documentaries of **Snowdon** (*The Uprising*, winner at Jihlava, screened at MOMA, New York), **Yu** (*China's Van Goghs*, winner at Shanghai, screened at Harvard University) and **Higgins** (*Colours of the Alphabet*, Winner Best Children's Rights Film, screened The Smithsonian & United Nations) demonstrate our strength in lens-based practice and media ethnographic work. Our academic-practitioners have all achieved world-leading status, with Snowdon's film recently being referred to as "a masterpiece of iphone cinema" (New York Times, 01/04/2020).

2.3 Support for Early Career Researchers

Each year the CMA proposes staff for the UWS Propel, Crucible, Grant Accelerator and Aurora/Women in Leadership development schemes that have a strategic focus on the development of early career researchers. To date, 17 staff (10 female and 7 male) have benefited from these programmes in the last 6 years. Seven ECR staff have also completed the SGSAH & SGSSS supervisory training programmes allowing us to grow our pool of PhD supervisors.

Additionally, central Research Services have created a funded studentship competition that must include ECRs and first-time supervisors in the supervisory team.

Our submission demonstrates this investment in advancing ECRs to the next level of their careers, a strong example being **Scott**, who has demonstrated a clear progression from small grant capture to major consortium bid success with research council funding (AHRC & ESRC). This success, combined with the quality of her written and practice-based outputs, has resulted in her promotion to Reader (2019). We are also proud of colleagues who have had their first academic job with UWS and who have benefitted from our ECR career development support and progressed their careers through promotion or relocation to other UK and international institutions. These would include **Dr Snowdon**/Utrecht University, **Dr Yu**/Queen Mary University, **Dr Green**/Glasgow University, **Dr Tessler**/Liverpool University and **Dr Ronan**/Royal Conservatoire Scotland.

2.4 Academia – Industry Exchange

Our researchers benefit from a fully integrated relationship with the creative industries facilitated by the CMA and fostered in large part by our multiple industry accreditations with ScreenSkills UK, BJTC, Drama UK and James that require us to conduct annual industry reviews to ensure our programmes are embedded within contemporary professional practice. Such relationships have in turn fostered specific research collaborations and activities resulting in practice-based and written outputs (Scott/BBC, Tucker/STV, Jeffery & McPherson/Gaiety Theatre).

Our partnership with Scottish Television (STV) to deliver local television from our Ayr campus 2015-17 (the only HEI to have a national broadcaster based on their campus) also facilitated a level of access and exchange with industry rarely achieved. More recently, our Knowledge Transfer Partnership (2018-2020) saw Verena Henn embedded fulltime within the ISO digital design agency, to conduct R&D on immersive technology. Led by Higgins, who committed to 0.5 days a week for two years, the **KTP was awarded the highest grade of ‘outstanding’ by Innovate UK** and has resulted in the establishment of isoLABS with whom Higgins and the UWS Immersive research cluster continue to work.

2.5 Research & Impact Rewards

Staff are rewarded for their research and impact activities in a variety of ways. Our My Contribution (performance review) process, rewards the successful achievement of objectives with an increment on the pay scale or, if exceptional, with a discretionary award and formal recognition by the university's principal. For reasons of confidentiality, we cannot reveal the names of colleagues who have benefitted from this process over the last six years. Additionally, colleagues who are part of the supervisory team of a Knowledge Transfer Partnership are entitled to an allocation of the overall award (average GBP10,000-15,000), that can be used at their discretion towards research activities and equipment.

Most importantly, research success is rewarded with resource and infrastructure investment. This has been the case for **Higgins** and UWS Immersive (GBP192,000), **McPherson** and the CCSE (GBP250,000), **Jeffery** and the Protracted Crisis Research Centre (GBP158,000 of GCRF Funds) and **Kosmala's** work on intangible Heritage (GBP67,000). Ultimately, for many researchers, the reward is promotion as is the case for **Collinson-Scott** and **Jeffery** during this REF period.

2.6 Research Students

Our unit has witnessed a very substantial increase in PhD enrolments (up 100% from 35 to 70 since 2014) and a more than 300% increase in our PhD completions (registering 23 completions compared to 7 in REF 2014). Due in part to the University's **investment in research studentships**, combined with a growing number of fee-paying international students attracted by our research expertise in media ethnography, virtual reality and participatory arts practice, our cohort includes students supported by grants from governments in Algeria, Nigeria, Poland, Germany, and the UAE. We also have collaborative supervisory arrangements with HdM Stuttgart in Germany and the Institute of Cultural Diplomacy in Berlin.

Progress in completions comes as the result of a combination of strategic initiatives including a new **online MY PGR platform** that provides the infrastructure for submitting annual reports, assessor reports, documenting transfer events and tracking the student's progress. **The Doctoral College**, who manage the platform, provide support and advice for our doctoral community and host an annual post-graduate conference with competitions for best research poster, abstract and presentation.

Our school provides each doctoral student with an individual work space, laptop, charging station and monitor (value GBP2,000). Each student has access to an individual GBP1,5000 research fund for conference attendance, fieldwork activities or additional resources. Work spaces are co-located in the **PGR Research Hub** with exclusive access to bookable seminar and screening rooms for hosting seminars, events and meetings. All students take part in our 9 month long Doctoral Induction Programme and benefit from **SGSAH and SGSSS doctoral training** workshops. The PGR research community forum provides representation on the school board and an effective feedback loop to staff and senior researchers. The forum supports students to deliver symposia and events often co-delivered with research clusters such as UWS Immersive (symposia 2017 & 2019) and the CCSE (symposia 2019 & 2020).

Together, our staff and doctoral students designed and delivered three SGSAH and SGSSS funded research methods workshops open to all research students across Scotland: Participatory Action Research in the Field (2018 McGillivray, Kosmala, Jeffery); Participatory Methods and the Affective Domain: Walking, Documenting and Sensing as Practice (2019 Kosmala and Jeffery); Co-designing Research (2020 Cross). These events welcomed over 80 research students from Scottish HE institutions to the UWS campus and 60 students attended the online COVID-19 delivery of the co-designing research session.

As a creative-industries focussed department we also have many staff completing PhDs. Since 2014, six colleagues have completed their doctorates: **Ronan/performance** (RCSSD), **Quinn/Screenwriting** (UWS), **Sweeney/Television Studies** (Univ. of Glasgow) **Hughes/Journalism** (Univ. of Middlesex), **Flynn/New Media** (UWS), **Forbes/Music** (Univ. of Glasgow). Currently we also have a further 5 staff (Mahon, Savage, Duffin, Jarvis, Kim) with university-funded PhDs underway. The percentage of staff either with a PhD qualification or studying for one has therefore **risen from 45% in REF2014 to 65% in 2020**.

Several of our doctoral studentships involve collaborative and applied research projects working with external organisations such as the Heritage Lottery Fund, the Ayr Gaiety Theatre (McCaffer), Renfrewshire Council (Wilson, Pham & Hell) and a SGSAH funded Applied Research Collaborative Studentship with the University of Edinburgh (Russian) co-supervising on the topic of virtual reality and disabled communities.

Post-doctoral destinations reflect the quality, value and reputation of our research community. For example: Dr Ben Parry (Senior Lecturer at Bath Spa University), Dr Eleanor Yule (Senior Lecturer, Liverpool Screen School, LJMU), Dr Mary Spaeth (Assistant Professor, University of Wisconsin-Stout), Dr Kyle Barratt (Lecturer, University of Waikato, New Zealand), Dr Kirsten McLeod (Lecturer, Edinburgh Napier University), Dr Pamela Barnes (Lecturer, University of Chester), Dr Nicola Black, (Associate Lecturer, University of Glasgow), Dr Iain Taylor (Lecturer, Birmingham City University), Dr Andrea Breuning (Director, Ludwigsberg Living Lab), Dr Mirjam Muller, (Senior Curator, Landesmuseum Stuttgart), Dr Chris Dooks, (Research Fellow, University of Edinburgh) and Dr Emilia Sosnowska (Research Fellow, Glasgow University).

2.7 Equality and Diversity

Our staff development strategy is informed by a commitment to diversity and equality as fundamental values. In the Scottish context, with less than 4% ethnic minority population, the significant issues around diversity in addition to race, relate to hidden disabilities and socio-economic barriers as well as age, gender, sexuality and religion. In an effort to tackle this, our research leads attend unconscious bias workshops and undertake equality, diversity and inclusion

impact reviews of research projects and proposals. This approach also informed the creation of our REF code of practice.

In 2016 UWS established a LGBTQ+ staff group and which takes part in Glasgow's annual Gay Pride parade. This visible manifestation of support for diversity exists alongside UWS' sector leading position for widening access to HE from all sectors of the community and its record in attracting students from under-represented socio-economic backgrounds (SFC report 2019). UWS has achieved Athena SWAN Bronze accreditation and is focused particularly on using mentoring, focus groups and champions to identify and remove any unfair barriers to progression. This intersectional approach to diversity is mirrored by the university's commitment to equality of opportunity for all staff. This has perhaps impacted most notably on our unit by virtue of the university's flexible working policy, that has supported several colleagues with families or caring responsibilities to maintain an active research career even when faced with significant periods of challenge (includes 5 colleagues in our current submission).

We have a growing population of female researchers (40% of our submission), along with many staff from diverse backgrounds both cultural and professional, ranging from industry professionals to second-career academics (over 50% of our submission). Thirteen of our staff are being submitted for the first time to the REF, and 10 of these are at lecturer level, demonstrating a commitment to supporting research activity across all levels of staff. Our Equality, Diversity and Inclusion (EDI) experience is valued, and **Higgins** is a founding member of the EDI Committee of the SGSAH (2020). As we look ahead, we see equity, diversity and inclusion as the bed rock of our community and much of our research seeks to reveal, overcome and understand the myriad ways that oppression and prejudice can limit our evolving understanding of what it means to be human.

3. Income, infrastructure and facilities

3.1 Research Income and Funding Strategy

During this REF period our research activity has delivered GBP540,000 in research income, an increase of over 380% from our income of GBP139,000 in REF 2014. Our awards in the same period have totalled over GBP1,000,000 not including GBP840,000 of major grant capture by our colleagues Profs McGillivray and McPherson including British Council, Horizon 2020, SCVO & EU funds.

Whilst several researchers have secured significant awards as principal investigators, including **Higgins** and **Jeffery**, with GBP168,000 from Innovate UK and GBP300,000 from the British Academy respectively, much of this income has been generated as a result of our involvement in larger national and international research consortiums. Examples include: EU Funds (Honeycomb: Creative Works GBP3,500,000/GBP150,000 UWS award with Ulster University, Dundalk Institute & Creative Skillset 2014-2015), Erasmus Plus (Creative Industries Global Network GBP200,000/GBP45,000 UWS award, Linköping University, Sweden, Stuttgart Media University, Germany, Artevelde University College Ghent, Belgium and Ryerson University, Canada 2014-16), AHRC (Connected Communities Resources of Hope GBP80,000/GBP13,000 UWS award, with University of Coventry 2016-2017), AHRC (Rethinking Waste GBP85,000/GBP24,000 UWS award with Bath Spa University 2019-2020), ESRC (Distant Voices Project GBP840,000/GBP88,000 UWS award with University of Glasgow 2017-2020) & AHRC (Antislavery Knowledge Network GBP1,900,000/GBP20,000 UWS award with University of Liverpool 2017-2021).

Our researchers have also been successful at securing mid-level and smaller research funds both as part of cross-institutional collaborations and working with cultural organisations, e.g. the Govan-Gdansk project led by Prof Kosmala with Creative Scotland GBP50/GBP8,000, Kosmala and the Royal Society of Edinburgh GBP20,000, and Collinson-Scott's series of projects under the AHRC Connected Communities programme: Listening to Voices with Queens University Belfast GBP40,000/GBP8,000, AHRC Fields of Green with University of Edinburgh GBP45/GBP9,000,

and the AHRC project, When Tomorrow Becomes Yesterday with University of Edinburgh (UWS) GBP20,000.

Complementing this (predominantly) research council income are a plethora of smaller (GBP10,000 and under) research projects representative of our engagement with local, national and international stakeholders including: NHS Lanarkshire, South Ayrshire Council, JCS West Lothian Council, Renfrewshire Council, SGSAH, Scottish Professional Football, Scottish Women in Sport, Scottish National Rural Network, National Air Traffic Services, British Academy, Diawa Anglo-Japanese Foundation, Polish Cultural Institute and the Sasakawa Foundation (Japan).

Additional projects include the 12-month Paisley Pearls digital art project in collaboration with Boredom Research, New Media Scotland and Renfrewshire Council (GBP20,000). Our colleagues have also been successful in securing several R&D innovation vouchers from the Scottish Funding Council, establishing links with local businesses that lead to employment and research collaborations, such as the successful KTP that has resulted in employment and upwards of GBP1,000,000 projected income for the ISO organisation.

3.2 Organisational Investment

The Division of Arts and Media sits within the School of Business and Creative Industries at UWS. Our research activities benefit from administrative and resource support from the wider school. Institutional research funds provided to the school are channelled through the Creative Media Academy (GBP20,000-30,000k per annum) to support a research seminar series, symposia, conference attendance, fieldwork and research events. Postgraduate students are actively involved in co-planning and co-curating research events and workshops, and are strongly encouraged to engage with the wider Scottish HEI research community through the SGASH and our collaborative relationships with cultural partners.

In addition to the CMA, our researchers benefit from the infrastructure and events of several interdisciplinary research centres either located within our school or led by one of our senior researchers all of whom have benefitted from significant organisational investment. This has been the case for **Higgins** and UWS Immersive (GBP192k investment for 3 studentships & events), **McPherson** and the Centre for Culture, Sport and Events (GBP250,000 investment for 3 studentships and 2 research assistants), **Jeffery** and the Centre for Protracted Crisis Research Centre (GBP158,000 of GCRF Funds for 2 research assistants) and **Kosmala's** work on intangible heritage (GBP67,000 investment). Smaller investments have also been made to the Centre for African Research and Economic Development (CAREED) and the Scottish Centre for Island Studies led by Dr. Kathryn Burnett.

Doctoral students benefit from separate funds administered by the school and each student receives an additional GBP1,500 research funds towards fieldwork and conference attendance in addition to a free laptop and networked workstation with laptop dock and monitor. Working with the University's Doctoral College, the School also provides subject specific support including the delivery of doctoral research training including sessions on ethics and fieldwork and practice-based research. Our research students also benefit from our membership of the Scottish Graduate School for the Arts and Humanities (SGSAH). We delivered four three-day research methods workshops attended by members of the whole SGSAH PhD community in aspects of practice-based and community focused research methods between 2017 and 2020.

3.3 Support Staffing and Infrastructure

Staff in the CMA benefit from subject specific technical support from our studio and technical team consisting of two individuals based on our Ayr campus who support our practice-based research and impact activities. The School also provides a dedicated member of our professional services staff to support research activities, and this includes pre-award budgeting, time allocation estimates and submission support. This dedicated support works in synergy with the CMA peer supported grant application review process that has been particularly successful resulting not only in significantly more research income (388% increase since 2014) but also a significantly improved ratio of submissions to successful awards (30% success rate in 2020 up from 8% in 2014).

3.4 Specialist Research Infrastructure for Impact

Our research community benefits from our GBP90,000,000 **state-of-the-art facilities at our Ayr campus** where our film, television, radio, performance and music studios are located. Our television and radio facilities are so impressive that between 2015 and 2017, UWS became **the only UK university to have a national broadcaster based on their campus**. The CMA partnership with Scottish Television to deliver local news employed two former students and operated in collaboration with our journalism and broadcast researchers. Similarly, our music studios are of a professional standard making it possible for practice-based researchers to **record albums such as McGeechan's, whose album *Starless* was nominated for Scottish Album of the year in 2017**. Our performance researchers benefit from our partnership with the **Ayr Gaiety Theatre**, providing our students the opportunity to work directly on live productions. The Gaiety is **the only Higher Education (HE) learning theatre in Scotland**. This initiative is the subject of a practice-based PhD study and Heritage Lottery Funded research project.

Our media and film researchers benefit from our professional level equipment, such as the ARRI and Canon cameras that have improved our production values to the extent that in 2020 our students beat off competition from the National Film and Television School to win **the UK Royal Television Society best student drama award**. This excellence in creative practice is also evidenced in our award-winning research that has witnessed three of our practice-based researchers garner awards in China (Tianqi Yu), Russia (Snowdon) and Turkey (Higgins) as well as prestigious invitations to screen at Harvard (Yu) the Smithsonian (Higgins) and the New York MOMA (Snowdon). This work features in our impact case study on 'Screen Practice as an Agent of Change'.

The **UWS Immersive Media Lab** (GBP30,000 investment) is located in Paisley where our VR headsets, motion sensors, 360 cameras and specialised computing equipment are located alongside the **Fujitsu Innovation Lab** (GBP20,000 investment). Six of our UWS Immersive doctoral researchers benefit from this dedicated research space where they are co-located as a distinct research cluster. The labs have hosted two research symposia and VR exhibitions in 2017 and 2019 with international guests such as Catherine Allen from Limina Immersive (CEO of the UK's only VR cinema), Dan Tucker curator from Sheffield Docfest's Alternate Realities and Tobey Coffey, head of digital development at the National Theatre.

3.5 Cross-HEI Infrastructure Collaboration

In addition to the specialized spaces our cultural tenancy at the **Centre for Contemporary Arts (CCA)** allows us to be involved in curation, screenings and presentation of exhibitions in a city centre location in Glasgow, often co-delivered with colleagues at the University of Glasgow and Glasgow School of Art. Our dedicated screening and seminar space at **Film City in Glasgow's media quarter** is situated next to the BBC, STV and in the same building as Scotland's only Dolby sound studio alongside over 30 independent production companies. Our researchers have delivered over 20 workshops and symposia at Film City, often in conjunction with neighbouring HEIs (UoG & GSA) but also in collaboration with cultural organisations such as the Glasgow Film Festival, the Royal Television Society, the Scottish Documentary Institute and Creative Scotland. Our partnership with the **Ayr Gaiety Theatre** has been developed as a key site for performance, co-programming and ongoing research in theatre and intangible cultural heritage that attracts performance researchers from across the UK and internationally (Jeffery, McPherson, McCaffer).

3.6 In-kind Benefits

Staff in the CMA benefit from regular in-kind contributions from industry professionals who deliver masterclasses and seminars without payment. Recent sessions have included contributions from sector leaders; Jackie Wylie, Director of the National Theatre of Scotland and Steve Carson, Director BBC Scotland, Oscar winner James Gay-Rees (Producer of Amy & Senna), Tommy Gormley (First Assistant Director and Associate Producer of Star Wars: The Force Awakens) and Iain Smith OBE (Mad Max: Fury Road, Children of Men, The Fifth Element). Additionally, as a result of our partnership strategy, our researchers benefit from access to the state of the art immersive and film production facilities at isoLABS and Film City Glasgow respectively.

4. Collaboration and contribution to the research base, economy and society

4.1 Research Collaborations, Networks and Partnerships

Our contribution to the research base, economy and society in many ways reflects our desire to understand and influence a centre/periphery dynamic at work both within the creative industries and society more broadly. This dynamic stems in part from the University of the West of Scotland's multi-campus nature that, as the name suggests, encompasses a significant geographic area that includes both a proximity to the heart of the Scottish creative industries in Glasgow and the rural towns and communities located closer to our Ayr and Dumfries campuses.

Our commitment to this periphery can be seen in particular in the work of Scottish Centre for Island Studies (SCIS), which goes back 15 years and has made a significant contribution to the field of rural entrepreneurship (Burnett & Danson). Between 2014-15, our researchers led by **Higgins** collaborated with the **University of Ulster, Creative Skillset and Dundalk Institute of Technology** on the GBP3,520,000 EU funded project Honeycomb: Creative Works programme undertaking research and fieldwork assessments of digital skills in the West and South West of Scotland resulting in reports such as 'Filming the Future: developing the Film and Broadcast Sector

(https://pure.ulster.ac.uk/ws/portalfiles/portal/11490728/Film_and_Broadcast_Sector_Development_Report_Screen_%28Final%29.pdf) and Smart Moves: Developing the Interactive Media Sector (<http://thehoneycomb.net/public/research-reports/Interactive%20Media%20Report.pdf>).

Such multi-institutional research collaborations and our commitment to rural communities are further evidenced by **McGillivray's** research with **Glasgow School of Art and Robert Gordon University** on sustainable business models funded by **Creative Scotland** which resulted in the 2015 report, 'Collective Futures: Cultivating Creative Collectives'. (<https://static.a-n.co.uk/wp-content/uploads/2018/04/Collective-futures-cultivating-creative-collectives.pdf>)

Our collaboration with the **University of the Highlands and Islands and Herriot Watt University** delivered a two day conference on "Enterprising Culture" Entrepreneurship, Endorsement and Engagement of Minority Language in Europe's Remote Rural and Small Island Communities in 2017 led by Dr Burnett, (Director SCIS) funded by the SGSAH (<https://scotcis.wordpress.com/news-and-events/enterprising-culture-entrepreneurship-endorsement-and-engagement-of-minority-language-in-europes-remote-rural-and-small-island-communities/>). Additionally, our contributions to the Scottish rural sector are recognised and disseminated internationally through our involvement in the **University of the Arctic Sustainable Arts and Design Network (ASAD)** and specifically our contributions to their Relate North annual conference and publications between 2013 and 2018. Staff (Jeffery, Burnett, Higgins) and students also undertook exchanges funded by Erasmus+ between the **University of Lapland** and UWS, with UWS hosting MA and PhD students from Finnish Lapland as part of our ongoing exchange programme.

4.2 Engagement with Users, Beneficiaries and Communities

Our academic practitioners are active across all the major industry organisations with **Higgins** sitting on the Scottish Creative Media Network executive, Independent Producers Scotland board, the Cultural Enterprise Office's Creative Industries Advisory Board as well as on the board and executive of the Scottish Graduate School for Arts and Humanities (SGSAH).

Working with CMA deputy director, Paul Tucker, who sits on the **Royal Television Society** Scottish board, the CMA contributed to the successful bid to locate Channel 4's regional hub in Glasgow as well as to the successful Creative Cities Convention 2020 bid (now postponed until 2022). CMA colleagues including Higgins & Tucker regularly sit on the national; **BAFTA, RTS, Alt-W, Creative Scotland, Creative Enterprise** and local; **Renfrewshire, Ayrshire culture committee**, funding panels and juries. Staff have also provided evidence and feedback to national reviews including to the **Scottish Parliament's Culture Committee** and the **European Cultural Parliament**.

Our work is also characterised by a long term strategic commitment to collaboration with particular communities and geographies – and here we would particularly highlight the CCSE Renfrewshire partnership (led by Profs McPherson and McGillivray), building on the legacy of **Paisley's UK City of Culture bid**, the decade-long programme of research exchange between the two post-industrial **shipyard communities of Govan and Gdansk** (led by Profs Kosmala and Jeffery) and the ongoing work between the **UK and India** led by Prof Jeffery. The latter two are described in more detail in our Impact Case Study on 'Creating Value and Transforming Lives through Arts and Media Practice'.

4.3 Contribution to Economy and Society

Our researchers demonstrate leadership within the sector, particularly evident through our activities in Glasgow. Our well-established partnership with the **Glasgow Film and Glasgow Short Film Festivals** led us to curate, and sell out, the inaugural Virtual Reality film programme and symposium on **Immersive Filmmaking** in 2017 and then to expand this programme in 2019 when we delivered both an interactive VR and cinema VR programme, including a symposium on VR as a new art form. These events delivered by our UWS Immersive research group have also provided opportunities to share new practice-based research with media coverage from the BBC and STV in 2017 reporting on our 360 VR film, the first ever produced in Scotland. This innovative VR work was also showcased by UK DCMS at their event at the **Beijing Embassy where the Princess Royal** and other dignitaries experienced VR for the first time. Building on our expertise in VR, **Higgins** collaborated with colleagues in the School of Computing to establish an SFC and AHRC funded Knowledge Transfer Partnership with the award-winning ISO digital design studio that resulted in an 'outstanding' rating from Innovate UK for the estimated GBP1,000,000 of income it will generate in the coming years. His expertise has been recognised by invitations by the AHRC to represent the UK creative industries/academia nexus in China and to present his work to colleagues at the **UN, UNICEF and UNESCO**.

An example of this impact came in 2016, when the *Learning Through Film: Human Rights in Scotland* book and accompanying DVD co-authored by **Higgins** was distributed to every secondary school in Scotland as part of a project funded by Creative Scotland and supported by UNICEF's Rights Respecting School's campaign. This initiative featured on BBC Scotland and in the national newspapers furthering the debate on human rights in Scotland and specifically its inclusion in the curriculum for excellence.

4.4 Discipline, Interdisciplinarity and International Priorities

Additionally, our commitment to socially relevant and interdisciplinary research activities is evidenced by our innovative and creative work with the Criminal Justice system (Collinson-Scott/UK) and on global issues such as the Environment (**Collinson-Scott/UK, Kosmala/Brazil & Jeffery/India**) Race (**Collins/Africa & Higgins/Africa**) and Technology (**Higgins/China & Kosmala/Japan**).

Our lens-based practice-research has also featured prominently at hundreds of international festivals, conferences and prestigious university seminars, with screenings and discussions of our work at International Documentary Film Festival **Amsterdam** (IDFA), DocPoint Festival (**Helsinki**), One World Film Festival (**Prague**), the BFI (**London**), MOMA (**New York**), **Harvard** (USA), the **Smithsonian Institute** (Washington, USA), **Shanghai Film Festival, Meetings Festival (Denmark)** and in the case of *Colours of the Alphabet* a continent-wide digital release in **27 indigenous languages to 49 countries in Africa**. The Africa wide release was supported by **UNESCO** and amplified by an online social media campaign that coincided with UNESCO's International Mother Language Day (IMDL) that was expanded to a 40 language global release with the **United Nations** in 2021.

Recurring throughout all our research activities is a dynamic relationship between the local and the global. Our work explicitly seeks to bring both new insights through our media ethnographic representations of complex realities to the UK and equally to take what we know and learn of the UK creative industries to the world. Both processes inform each other and our staff disseminate their insights and knowledge widely across the sector.

4.5 Wider Influence and Contributions

350+ Contributions to Academic Events: Staff gave 100+ CMA funded conference presentations within the census period, with a further 250+ fully funded by inviting hosts. Staff are members of funded networks, including the AHRC 'Temporalities in Community Co-Produced Research' and evaluation and impact of the AHRC's Connected Communities programme (Jeffery), ESRC network on Ways of Knowing in Neighbourhood Working, University of Sheffield (Jeffery), and the AHRC Creative Industries Knowledge Exchange China (Higgins), Innovate UK Knowledge Transfer Network (Higgins), the MeCSSA Practice-Research Network (Higgins, Jeffery, Firth, Snowdon), BFI Community Filmmaking Network (Higgins), University of the Arctic Thematic Network on Arctic Sustainable Art and Design (Jeffery, Burnett, Higgins), Art, Aesthetics, Creativity and Organisation International Research Network (Kosmala).

Invited talks and keynotes include: University of Bremen, VGIK International Film Festival Moscow, School of Oriental and African Arts (SOAS), Baltic Cultural Centre and European Solidarity Centre, Gdansk, Edinburgh Napier, Glasgow School of Art, Centre for Research on Arts and Media University of Westminster, Leeds Trinity, Somerset House, Roehampton University, Sussex University, the Smithsonian, New York Museum of Modern Art, Harvard Film Studies Department, School of Design, Carnegie Mellon University, Shiv Nadar University, Delhi, UNICEF UK AGM, British Council, Tokyo Metropolitan University, Korean Advanced Institute of Science and Technology, Communication University of China, International Union of Anthropological and Ethnological Sciences (IUAES), University of Hong Kong, European Forum for Social Justice, Howard League International Conference, University of Ghana, Oxford University and the Scottish Parliament.

12+ Reviewer & Advisory Roles: These include the Leisure Studies Association (McGillivray, Executive), AHRC Peer Review College (McPherson, Kosmala) and other peer-reviewing for research councils and other funders, including the British Academy, EPSRC and MRC for interdisciplinary projects with a global development focus (Jeffery) and a creative industries focus (Higgins, McPherson).

200+ Media Appearances: Over this period, staff research findings have featured on BBC Scotland, Scotland Tonight, STV News, CNN, BBC World Service, Korean TV, The Scotsman, The Herald, Sunday Herald, The National, The Metro, Irish Times, The Guardian, Huffington Post, Washington Post, Independent, The Times and The New York Times, The New Yorker, among others.

30+ External PhD Examinations & External Examining roles: Over this period, staff examined PhDs externally, including Edinburgh Napier University, University of Manchester, University of Cambridge, Leeds University, University of Stirling (BA Journalism), Leeds Trinity University (BA (Hons) Television Production, Sheffield Hallam University Theatre and Performance, University of Salford BA Broadcasting and Radio, University of Lincoln BA (Hons) Journalism, University of Cambridge (MPhil in Arts, Creativities and Education), University of East London BA (Hons) and MA Song-writing and Performance.